



North Carolina

MCB Camp Lejeune/MCAS New River

Facility and Location

Marine Corps Base (MCB) Camp Lejeune is a training facility on the coastal plain in Onslow County and covers approximately 236 square miles, including 14 miles of coastline. The base is bisected by the New River which forms an estuary and flows to the Atlantic Ocean. The City of Jacksonville is located north of the Base.

Since its inception in 1941, MCB Camp Lejeune has been the home of Marine Expeditionary Forces in Readiness. The Base provides facilities, support, and services for a population estimated at 150,000 active duty, dependents, retirees, and civilian employees.

Media Sampled and Findings

Drinking Water — In 2011, 55 samples reported no detection. Beginning in April 2004, monthly treated (finished) water sampling for perchlorate was initiated at all five water treatment plants and one distribution system at MCB, Camp Lejeune. To date, 435 samples taken from the six systems reported no detection for perchlorate. MCB, Camp Lejeune continues to sample treated water for perchlorate at these six locations on a monthly basis.

Groundwater — In 2011, 6 of 64 samples detected perchlorate from 0.09 to 0.46 ppb. In 2010, 41 of 41 samples detected perchlorate from 0.03 to 9.93 ppb. In 2009, 32 of 36 samples from monitoring wells detected perchlorate from 0.08 to 0.87 ppb. In 2008, 13 of 33 samples detected perchlorate from 0.21 to 0.92 ppb. In 2007, 17 of 28 samples taken as part of the sampling events associated with the Military Munitions Response Program (MMRP) detected perchlorate from 0.07 to 8.7 ppb. Prior to 2007, 2 of 161 samples detected perchlorate at 1.3 and 9 ppb. Follow up sampling was initiated after the 9 ppb detection and all online wells were resampled. This confirmatory sampling reported no detection.

Sediment — In 2011, one sample detected perchlorate at 1.04 ppb. In 2010, 12 of 12 samples detected perchlorate from 2.8 to 19 ppb. In 2009, one of four samples detected perchlorate at 0.97 ppb. In 2008, nine samples reported no detection. In 2007, two samples reported no detection. Prior to 2007, two samples reported no detection.

Soil — In 2011, 20 of 68 samples detected perchlorate from 0.68 to 25.8 ppb. In 2010, seven of seven samples detected perchlorate from 0.38 to 975 ppb. In 2009, 41 of 55 samples detected perchlorate from 1.1 to 350 ppb. In 2008, 28 of 177 samples detected perchlorate from 0.61 to 25.7 ppb. In 2007, 5 of 34 samples detected perchlorate from 0.95 to 96.9 ppb. Two samples were associated with a project for a property easement to the Onslow County Water and Sewer Authority for wastewater utility main installation and two others were taken during closure sampling of an open burn/open detonation (OB/OD) facility. Prior to 2007, one sample detected perchlorate at 0.64 ppb.

Storm Water — In 2011, one sample reported no detection.

Surface Water — In 2011, two samples detected perchlorate at 0.01 and 42.1 ppb. In 2010, four of four samples detected perchlorate from 0.08 to 0.17 ppb. In 2009, four of four samples detected perchlorate from 4.9 to 6.3 ppb. In 2008, 4 of 12 samples detected perchlorate from



0.01 0.23 ppb. In 2007, two samples reported no detection. Prior to 2007, two samples reported no detection.

Appropriate Action

The levels of perchlorate in soils at the Camp Devil Dog site (MMRP Unexploded Ordnance Site 19 (UXO-19)) are likely due to several Blow-In-Place procedures recently completed as part of an anomaly investigation underway at the site. The site is entering the Remedial Investigation/Feasibility Study stage where exceedences will be addressed.

In addressing the detections at MMRP Site UXO-02, a Risk Assessment and Screening will be performed in order to ascertain whether the detections pose a risk to human health or the environment. If it is determined that there is a risk action will be taken to mitigate the subject area to acceptable levels.

At MMRP Site UXO-06, soil samples taken in 2007 detected perchlorate above the former DoD perchlorate "level of concern" of 24 ppb within a sewer main easement on MCB Camp Lejeune. This site is currently in the Preliminary Assessment/Site Investigation (PA/SI) stage of investigation. Additional soil and groundwater samples were taken (in association with the 2008 MMRP PA/SI) in the vicinity of the 2007 perchlorate detection and all reported no detection (all other perchlorate samples for the former range were also non-detect or well below 1 ppb). All detections are below EPA Region IV Industrial Preliminary Remediation Goals for perchlorate in soil at this time. Remedial Activities will be evaluated when the PA/SI is complete under the MMRP.

MMRP Site UXO-08 completed the PA/SI stage of the Comprehensive Environmental Response, Compensation and Liability Act process in September 2011. The exceedence was detected in only one surface soil sample and no further munitions related contamination was found. The study findings recommend No Further Action.

At UXO-17 high detections were found in surface water and soil. The site is currently under an Expanded Site Investigation to assess concentrations and evaluate risk to human and ecological health risks. Currently, no unacceptable risk has been found.